Remarks

For the Claims:

Applicants submitted claims 1-31. In a first Office Action, mailed 3 May 2007, claims 1, 3, 4, 7-10, 14-23, and 27-29 were rejected, and claims 2, 5, 6, 11-13, 24-26, 30, and 31 were objected to as being dependent upon rejected base claims. In an Amendment, dated 2 August 2007, Applicants canceled claims 2, 16-23, and 27-31, amended claims 1, 5, 6, 11, 12, 24, 25, and 26, and retained claims 3, 4, 7-10, and 13-15 as originally submitted. In particular, claim 1 was amended to include the limitations of objected to claim 2. In addition, each of objected to claims 5, 6, 11, 12, 24, and 25 were amended to independent form as suggested in the first Office Action. Following submission of the 2 August 2007 Amendment, claims 1, 3-15, and 24-26 were pending in this application.

In response to the Amendment, a second, non-final Office Action, mailed 16 October 2007, rejected all claims i.e., claims 1, 3-15, and 24-26. In a Response, dated 2 January 2008, claims 1, 3-15, and 24-26 were retained as originally or previously submitted and arguments were presented regarding the impropriety of combining the primary references. This third, non-final Office Action, responding to the 2 January 2008 Response, again rejects all claims, i.e., claims 1, 3-15, and 24-26. Applicants amend claims 11, 12, and 24 and retain claims 1, 3-10, 13-15, 25, and 26 as originally or previously submitted. Applicants respectfully request reconsideration in view of the following remarks.

This Office Action rejects claims 1, 3-7, 9-14, and 24-26 under 35 U.S.C. 103(a) as being unpatentable over Irvine et al.,

U.S. Publication No. 2002/0191695 (hereinafter Irvine), in view of Lane et al., U.S. Patent No. 5,933,567 (hereinafter Lane). Irvine teaches a method of interframe coding in a system for encoding digital video. Lane teaches of a method and apparatus for controlling the position of the heads of a digital video tape recorder during trick play operation and for recording digital data on a tape.

Regarding independent claim 1, the Office Action alleges that Irvine discloses the subject matter of claim 1 except for specifically teaching a method of facilitating transmission of video frames of multiple channels in a communication system and distributing the coded quadtree coefficient groups among the multiple channels for transmission. The Office Action further alleges that Lane teaches a method of facilitating transmission of video frames of multiple channels in a communication system and distributing the coded quadtree coefficient groups among the multiple channels for transmission. The Office Action asserts that the transmission of digital data, such as video requires a significant amount of bandwidth. The Office Action further asserts that typical wireless channels exhibit a lower bandwidth and higher error rate than wired channels. The Office Action concludes that in order to provide improved error rate and more bandwidth for transmission of digital data, such as video, it would have been obvious to use a plurality of traffic channels for video transmission as taught by Lane in the video transmission system of Irvine.

As discussed in the 2 January 2008 Response, the Office Action cites passages in the Irvine reference at paragraph [0028], lines 1-8, and paragraph [0029], lines 1-20 in association with Applicants' feature of claim 1 of distributing said coded quadtree coefficient groups among said multiple channels for transmission, said distributing operation including

assigning said coded quadtree coefficient groups to said multiple channels such that contiguous portions of said frame data will be transmitted over different ones of said multiple channels. Regarding the distributing feature of claim 1, the cited passages within Irvine merely disclose transmitting or conveying a compressed video signal through a physical medium, through a transmission channel. Accordingly, the citation of these passages in the Irvine reference are not relevant to the claimed distributing feature.

The Office Action cites col. 22, lines 62-67, of the Lane reference as the alleged teaching of Applicants' distributing operation of independent claim 1. In this cited passage, Lane discloses that when multiple channels are being used to transmit the video/audio transport data packets, the transport encoder's video transport packetizer 106 performs the operation of separating the video packets into multiple data streams for transmission via separate channels using the transport channel prioritizer 105.

Applicants, without conceding the propriety of the combination of these references in the first place, respectfully assert that if the teachings of Irvine and Lane were somehow combined, the theoretical combination would fail to produce the claimed invention. Well-established patent practice dictates that a combination of prior art references cannot render obvious that which none of the prior art teaches or suggests. As stated in In re Wood, 202 USPQ 171, 174 (C.C.P.A. 1979):

> The test for obviousness is not whether the features of one reference may be bodily incorporated into another reference....Rather, we look to see whether combined teaching render the claimed subject matter obvious.

Accordingly, the proper evaluation for determining patentability is to consider whether combined teachings render the claimed subject matter obvious. In this situation, even if the digital video encoding methodology, as taught by Irvine, and separating the video packets into multiple data streams according to a prioritizing scheme for transmission via separate channels, as taught by Lane, were somehow combined, the theoretical combination would not render obvious Applicants' invention of claim 1. At best, a theoretical combination of the Irvine digital video encoding methodology and the Lane transmission of separate video packets via separate channels might result in the prioritized transmission of encoded video via separate channels.

However, the theoretical combination fails to teach or suggest the limitation of independent claim 1 of the distributing operating including "assigning said coded quadtree coefficient groups to said multiple channels such that contiguous portions of said frame data will be transmitted over different ones of said multiple channels." That is, the Lane prioritization scheme is not a teaching of assigning video packets to the multiple channels such that contiguous portions of the frame data will be transmitted over different ones of the multiple channels. Indeed, it appears that the Office Action failed to consider this claim limitation when rejecting independent claim 1 because the Office Action utterly fails to mention the assigning feature in connection with either of the Irvine or Lane references. As stated in In re Lowery, 32 F.3d 1579, 32 USPQ2d 1031, 1034 (Fed. Cir. 1994):

> The PTO must consider all claim limitations when determining patentability of an invention over the prior art. *(emphasis supplied)*

Thus, when determining patentability of an invention, all claim limitations, including Applicants' assigning feature of

independent claim 1, must be considered. Lane utilizes a video data prioritization and packetization methodology to facilitate a video tape recorder's (VTR's) identification of data which is important to trick play operation (col. 22, lines 6-8). Lane teaches that a video codeword data stream which is output by a prioritizer 104 can be packetized and divided into two or more data streams for transmission via multiple transmission channels (col. 22, lines 30-49). Lane provides an example in which two channels may be a high priority and a standard priority transmission channel. In such a situation, the video transport packetizer 106 divides the video packets into different data streams based on the priority level assigned by the prioritizer 104 to the data contained in each video packet. Lane also mentions a transmission priority scheme which may be implemented by a transport data channel prioritizer 105. Lane further teaches that regardless of the transmission priority scheme implemented, each of the data packets output by the transport encoder is identified by the use of headers which permit a VTR to identify the type and priority level of the data contained in each data packet to facilitate selection of the data which is most useful for trick play operation.

Thus, prioritization in the Lane methodology is optimized to assign data to priority levels based on the data's utility for generating a recognizable image or portion of an image during trick play operation (col. 24, lines 44-47).

In contrast, and as taught only by the Applicants, separately coding quadtrees to form coded quadtree coefficient groups and the distributed assignment of the coded quadtree coefficient groups to the multiple channels ensures that contiguous portions of the error frame (representative of the frame data) will be transmitted over different channels (Applicants' specification at paragraph [0109]). This assigned distribution facilitates the

estimation of wavelet coefficients during decoding that were lost or corrupted in transmission.

The Lane prioritization scheme is not a teaching, suggestion, or implication of data packets being assigned such that contiguous data packets/frame data will be transmitted over different one of the multiple channels, as recited in claim 1. That is, the passage from the Lane reference cited in the Office Action (i.e., col. 22, lines 62-67) may provide support for the Office Action allegation of distributing video packets among multiple channels for transmission. However, the cited passage in Lane is silent as to the claimed feature of data being assigned to the multiple channels such that contiguous portions of the frame data will be transmitted over different ones of the multiple channels. Further, Applicants have carefully reviewed the Lane reference and can find no teaching of this claimed feature.

Accordingly, Applicants respectfully submit that even if the teachings of Irvine and Lane were somehow combined, the resulting combination would fail to render obvious Applicants' invention of independent claim 1. Indeed, full and fair consideration of the Irvine and Lane references reveals the fallaciousness of the obviousness rejection set forth in the Office Action. Such an argument is fallacious because all claim limitations, namely the claimed assigning feature, were not fully considered when determining patentability of Applicants claimed invention. That is, as acknowledged in the Office Action, Irvine fails to disclose the claimed feature of distributing said coded quadtree coefficient groups among said multiple channels for transmission. Moreover, Lane discusses separating video packets into multiple data streams in accordance with a prioritization scheme for transmission via separate channels. However, Lane utterly fails to teach or suggest the assigning feature of independent claim 1.

For the reasons set forth above, since the prior art does not teach or suggest all of the claim limitations, a combination of Irvine and Lane cannot teach or suggest the same. Consequently, the theoretical combination fails to produce the invention of claim 1, providing evidence of the impropriety of the 103 rejection of claim 1.

For at least the reasons set forth above, the invention of claim 1 is not rendered obvious in view of a combination of Irvine and Lane. As such, claim 1 is believed to be allowable. Claims 3, 4, 7-10, 14, and 15 depend directly or indirectly from claim 1. Thus, claims 3, 4, 7-10, 14, and 15 are allowable by reason of dependency.

Claims 11 and 12 are being amended to return them to their form as originally filed. Accordingly, amended claims 11 and 12 depend from claim 10, which depends from independent claim 1. Thus, amended claims 11 and 12 are allowable by reason of dependency.

In addition, claim 11 is allowable for independent reasons. Amended claim 11 recites features in which the reconstructing operation includes determining an unsuccessful transmission of one of the packets and forming an estimate of the transform coefficients of the one of the packets in response to adjacent ones of the transform coefficients of others of the packets received via others of the multiple channels.

The Office Action cites an element within FIG. 1 and passages in the Irvine reference that allegedly teach Applicants' claimed reconstructing operation that includes the determining and forming operations of claim 11. In particular, the Office Action cites the block size assignment element 108 of FIG. 1, paragraph

[0008], lines 1-11, paragraph [0020], lines 1-8, and paragraph [0025], lines 1-18 as the alleged disclosure of Applicants' reconstructing operation that includes the determining and forming operations.

Applicants respectfully disagree with these Office Action allegations. As specified in Irvine, the encoder 102 includes the block size assignment element 108, which performs block size assignment in preparation for video compression (page 3, paragraph [0029]. That is, the block size assignment element 108 determines the block decomposition of a 16x16 block, subdivides the block into smaller blocks in a quad-tree fashion, and generates quad-tree data. Since the block size assignment element 108 is part of the Irvine encoder, and it prepares a block for video compression, it simply cannot reconstruct a video frame at the decoder from received packets as recited in claim 10, from which amended claim 11 depends.

In addition, the passages cited in the Office Action regarding the rejection of claim 11 fail to disclose Applicants' reconstructing operation that includes the determining and forming operations. These passages are reproduced below for the Examiner's convenience:

Paragraph [0008], lines 1-11:

> [0008] Video compression techniques are typically based on differential pulse code modulation (DPCM), discrete cosine transform (DCT), motion compensation (MC), entropy coding, fractual compression, and wavelet transform. One compression technique capable of offering significant levels of compression while preserving the desired level of quality for video signals utilizes adaptively sized blocks and sub-blocks of encoded DCT coefficient data. This technique will hereinafter be referred to as the Adaptive Block Size Differential Cosine Transform (ABSDCT) method.

Paragraph [0020], lines 1-8:

[0020] In an embodiment, image compression of the invention is based on discrete cosine transform (DCT) techniques. Generally, an image to be processed in the digital domain would be composed of pixel data divided into an array of non-overlapping blocks, NxN in size. A two-dimensional DCT may be performed on each block. The two-dimensional DCT is defined by the following relationship:

Paragraph [0025], lines 1-18:

[0025] Using ABSDCT, a video signal will generally be segmented into blocks of pixels for processing. For each block, the luminance and chrominance components are passed to a block interleaver. For example, a 16x16 (pixel) block may be presented to the block interleaver, which orders or organizes the image samples within each 16x16 block to produce blocks and composite sub-blocks of data for discrete cosine transform (DCT) analysis. The DCT operator is one method of converting a time-sampled signal to a frequency representation of the same signal. By converting to a frequency representation, the DCT techniques have been shown to allow for very high levels of compression, as quantizers can be designed to take advantage of the frequency distribution characteristics of an image. In a preferred embodiment, one 16x16 DCT is applied to a first ordering, four 8x8 DCTs are applied to a second ordering, 16 4x4 DCTs are applied to a third ordering, and 64 2x2 DCTs are applied to a fourth ordering.

These cited passages in Irvine are silent as to the claimed feature of reconstructing each video frame at a decoder from received packets. Accordingly, they are also silent as to the claimed features of the reconstructing operation including determining an unsuccessful transmission of one of the packets and forming an estimate of the transform coefficients of the one of the packets in response to adjacent ones of the transform coefficients of others of the packets. Instead, these cited passages are directed toward video compression operations (at an encoder), rather than a reconstruction operation occurring at a

decoder. Further, Applicants have carefully reviewed the Irvine reference and can find no teaching of these claimed features.

In addition, Lane discloses that multiple channels may be used to transmit the video/audio transport data packets (col. 22, lines 62-67). However, Applicants have reviewed the Lane reference and can find no teaching of the claimed reconstructing operation that includes the determining and forming operations, as recited in amended claim 11.

Accordingly, Applicants respectfully submit that even if the teachings of Irvine and Lane were somehow combined, the resulting combination would fail to render obvious Applicants' invention of claim 11 because the prior art does not teach or suggest all of the claim limitations. Consequently, the theoretical combination fails to produce the invention of claim 11, providing evidence of the impropriety of the 103 rejection of claim 11.

Independent claim 5 includes the limitations of distributing said coded quadtree coefficient groups and said coded motion vector blocks among said multiple channels for transmission, and assigning said coded motion vector blocks to said multiple channels such that adjacent portions of said motion vectors will be transmitted over different ones of said multiple channels. As taught only by the Applicants, separately coding blocks of motion vectors and the distributed assignment of blocks of motion vectors ensures that adjacent motion vectors will be transmitted over different channels (Applicants' specification at paragraph [0119]). This assigned distribution facilitates the estimation of motion vectors during decoding that were lost or corrupted in transmission.

Claim 5 is believed to be allowable for reasons similar to those set forth in connection with claim 1. That is, the Lane

reference may provide support for the Office Action allegation of distributing video packets among multiple channels for transmission. However, the prioritization scheme of Lane is neither a teaching nor a suggestion of assigning video packets (coded motion vector blocks, as recited in claim 5) such that adjacent portions of the motion vectors will be transmitted over different ones of the multiple channels. Since the prior art does not teach or suggest all of the claimed features, a combination of Irvine and Lane cannot render obvious that which is neither taught nor suggested by the prior art. Accordingly, claim 5 is believed to be allowable over the cited prior art for at least the aforementioned reasons.

Independent claim 6 includes distributing the coded quadtree coefficient groups and the coded motion vector blocks among the multiple channels for transmission, wherein the coded quadtree coefficient groups are distributed among the multiple channels independent from the coded motion vector blocks. The distribution of coded quadtree coefficient groups among the multiple channels independent from the coded motion vector blocks of claim 6 yields an error resilient source video coding scheme that generates multiple encoded bitstreams of the source video that can be decoded independently with the aim of providing a reasonable reconstruction quality of the source video when only one bitstream (i.e., one description) is received, and improved quality when multiple bitstreams (i.e., multiple descriptions) are available (Applicants' specification at paragraph [0069]).

Claim 6 is believed to be allowable for reasons similar to those set forth in connection with claims 1 and 5. That is, the Lane reference may provide support for the Office Action allegation of distributing video packets among multiple channels for transmission. However, the prioritization scheme of Lane is neither a teaching nor a suggestion of distributing coded

quadtree coefficient groups independent from the coded motion vector blocks among the multiple channels for transmission. Since the prior art does not teach or suggest all of the claimed features, a combination of Irvine and Lane cannot render obvious that which is neither taught nor suggested by the prior art. Accordingly, claim 6 is believed to be allowable over the cited prior art for at least the aforementioned reasons.

Claim 24 is being amended to delete the extraneous word "and." Independent claim 24 includes limitations directed toward a system that includes an output interface for receiving coded quadtree coefficient groups, the output interface assigning the coded quadtree coefficient groups to the multiple channels in a communication network such that adjacent portions of the frame data will be transmitted over different ones of the multiple channels and an input interface for receiving transmitted packets of coded quadtree coefficient groups from a second system via the multiple channels. Independent claim 24 further includes the limitation of an estimator in communication with a decoder, wherein upon determination of an unsuccessful transmission of one of the packets, the estimator forms an estimate of the transmitted coded quadtree coefficient groups of the one of the packets in response to adjacent ones of the transmitted quadtree coefficient groups of others of the packets received via the multiple channels.

Independent claim 24 is believed allowable for reasons similar to those set forth in connection with independent claim 1. That is, neither Irvine nor Lane teach or suggest the feature of an output interface assigning coded quadtree coefficient groups to the multiple channels <u>such that adjacent portions of the frame data will be transmitted over different ones of the multiple channels</u>. Since neither Irvine nor Lane teaches or suggests all of the claim limitations, a combination of Irvine

and Lane cannot teach or suggest the same. Consequently, the theoretical combination fails to produce the invention of claim 24, providing evidence of the impropriety of the 103 rejection of claim 24.

Independent claim 24 is believed to be allowable for at least an additional reason. Regarding claim 24, the Office Action acknowledges that Irvine does not teach an estimator in communication with a decoder, wherein upon determination of an unsuccessful transmission of one of the packets, the estimator forms an estimate of the transmitted coded quadtree coefficient groups of the one of the packets in response to adjacent ones of the transmitted coefficient groups of others of the packets received via the multiple channels. However, in connection with the rejection of claim 11, which contains similar features, the Office Action alleges that Irvine does teach of determining an unsuccessful transmission of one of the packets and forming an estimate of the transform coefficients of the one of the packets in response to adjacent ones of the transform coefficients of others of the packets received via others of the multiple channels. Thus, there is some inconsistency in the claim rejections between claims that have similar features.

Nevertheless, as discussed in detail in connection with claim 11, and as corroborated in connection with the rejection of claim 24, Irvine fails to teach of an estimator in communication with a decoder, wherein upon determination of an unsuccessful transmission of one of the packets, the estimator forms an estimate of the transmitted coded quadtree coefficient groups of the one of the packets in response to adjacent ones of the transmitted coefficient groups of others of the packets received via the multiple channels.

Regarding the rejection of claim 24, the Office Action cites passages in the Lane reference as disclosure of these features. These passages are reproduced below for the Examiner's convenience:

Col. 7, lines 1-27:

estimation/compensation is used in the temporal prediction. While P-frames may contain some intra-coded data, a complete picture, of the same quality as a picture which can be generated from an I-frame, cannot be generated from a P-frame alone because of the use of forward motion estimation/compensation in a P-frame.

B-frames are coded by a bidirectional motion compensated predictive encoder using the two adjacent I- or P-frames. B-frames are temporally predicted from two adjacent anchor frames. Both I- frames and P-frames serve as anchor (or reference frames) to the motion compensation of other frames. The B-frame temporal prediction uses motion compensation in forward and/or backward directions. B-frames are never used to predict other frames. Because of the dependence of B-frames on the two adjacent anchor frames, B-frames alone do not contain sufficient data from which to generate a recognizable picture.

The above three types of frames differ in their use of motion estimation. Motion estimation refers to the process of computing the spatial displacement of blocks of pixels due to motion. The resultant motion vectors are used in motion-compensated predictive coding. MPEG uses both forward motion estimation. (in which the estimation is of the future referenced to the past), and backward motion estimation (in which the estimation is of the past referenced to the future). Forward and backward motion estimation are also combined to produce bidirectional motion estimation.

Col. 19, lines 59, through col. 20, line 6:

encoded video data, e.g., a video codeword data stream. To produce the video codeword data stream, the video encoder 102 may use one or more known encoding and data compression techniques such as motion estimation and/or other MPEG encoding techniques. Accordingly, depending on the encoding technique used, the encoder can output data in the form of codewords corresponding to various types of video data including video frames, superblocks, slices, macroblocks, and various other subsets of video

> information which the data in the codeword data stream can represent in accordance with various possible data structures and encoding techniques. The video encoder 102 may generate picture headers in addition to codewords, with an individual picture header being associated with the particular codewords that comprise each individual video frame.

These cited passages in Lane are silent as to the claimed features of an estimator in communication with a decoder, wherein upon determination of an unsuccessful transmission of one of the packets, the estimator forms an estimate of the transmitted coded quadtree coefficient groups of the one of the packets in response to adjacent ones of the transmitted coefficient groups of others of the packets received via the multiple channels. Instead, these cited passages are directed toward encoding techniques. Further, Applicants have carefully reviewed the Lane reference and can find no teaching of these claimed features.

For at least the reasons set forth above, Applicants respectfully submit that even if the teachings of Irvine and Lane were somehow combined, the resulting combination would fail to render obvious Applicants' invention of claim 24 because the prior art does not teach or suggest all of the claim limitations. Consequently, the theoretical combination fails to produce the invention of claim 24, providing evidence of the impropriety of the 103 rejection of claim 24.

Independent claim 25 includes limitations directed toward an output interface for receiving coded quadtree coefficient groups, the output interface assigning the coded quadtree coefficient groups to the multiple channels in a communication network such that adjacent portions of the frame data will be transmitted over different ones of the multiple channels and an input interface for receiving transmitted first packets of coded quadtree

coefficient groups and second packets of motion vector blocks from a second system via the multiple channels.

Independent claim 25 is believed to be allowable over the prior art for at least the reasons set forth above. That is, nothing in either of Irvine or Lane teaches or suggests the feature of an output interface assigning coded quadtree coefficient groups to the multiple channels such that adjacent portions of the frame data will be transmitted over different ones of the multiple channels. Since neither Irvine nor Lane teaches or suggests all of the claim limitations, a combination of Irvine and Lane cannot teach or suggest the same. Consequently, the theoretical combination fails to produce the invention of claim 25, providing evidence of the impropriety of the 103 rejection of claim 25.

Claim 26 depends from claim 25 and is allowable by reason of dependency. In addition, claim 26 is allowable for the reasons similar to those set forth in connection with claims 11 and 24. Claim 26 recites the feature of a system that includes an estimator in communication with the decoder, wherein upon determination of an unsuccessful transmission of one of the second packets (of motion vector blocks, claim 25), the estimator forms an estimate of the motion vector blocks of the one of the second packets from an average of surrounding ones of the motion vectors of others of the second packets received via the multiple channels.

The Office Action acknowledges that Irvine does not teach an estimator, as recited in claim 26. In supporting the rejection of claim 26, the Office Action alleges that Lane teaches an estimator, and cites the passages at col. 7, lines 1-27, col. 19, lines 59-67, and col. 20, lines 1-6, as evidence of the alleged teaching. These passages are the same as those cited in

connection with the rejection of claim 24. However, as discussed above in connection with claim 24, these passages are silent as to the claimed estimator. Instead, these cited passages are directed toward encoding techniques.

Consequently, even if the teachings of Irvine and Lane were somehow combined, the resulting combination would fail to render obvious Applicants' invention of claim 26 because the prior art does not teach or suggest all of the claim limitations. Consequently, the theoretical combination fails to produce the invention of claim 26, providing evidence of the impropriety of the 103 rejection of claim 24.

This Office Action rejects claim 8 as being unpatentable over Irvine, in view of Wu et al. as applied to claim 1 above, and further in view of Jacquin et al., U.S. Patent No. 6,625,217 (hereinafter Jacquin).

Regarding claim 8, this Office Action replaces the formerly cited Wu reference with the Lane reference when making the rejection of claim 1. Accordingly, Applicants presume that the Office Action rejection of claim 8 should have indicated that claim 8 is unpatentable over Irvine, in view of Lane as applied to claim 1 above, and further in view of Jacquin et al., U.S. Patent No. 6,625,217 (hereinafter Jacquin). Accordingly, claim 8 is discussed below in the context of its rejection in view of a combination of Irvine, Lane, and Jacquin. Jacquin teaches a method for optimizing a wavelet packet structure for subsequent tree-structured coding.

The Office Action alleges that Irvine teaches the transforming operation of claim 8, but fails to specifically teach the coding operation comprises utilizing a zerotree wavelet coding algorithm. The Office Action further alleges that Jacquin

teaches the coding operation utilizing a zerotree wavelet coding algorithm and concludes that it would have been obvious to use a zerotree wavelet coding algorithm taught by Wu et al. in the video frame [*sic*]. As mentioned in the 2 January 2008 response, Applicants are unsure what is meant by the above allegation since the Office Action further cites Jacquin as including a teaching of utilizing a zerotree wavelet coding algorithm. Nevertheless, claim 8 depends from independent claim 1 and is believed allowable over the prior art for at least the reasons set forth in connection with claim 1.

This Office Action rejects claim 15 under 35 U.S.C. §103(a) as being unpatentable over Irvine in view of Lane, as applied to claim 1 above, and further in view of Wu et al, U.S. Patent No. 7,016,337.

Claim 15 includes limitations directed toward the communication system being a satellite-based communication network and the multiple channels are wireless voice channels managed by the satellite-based communication network. In support of the rejection of claim 15, the Office Action alleges that a combination of Irvine and Lane disclose the subject matter of claim 1, except for specifically teaching wherein the communication system is a satellite-based communication network. However, the Office Action alleges that Wu teaches the features of claim 15 and concludes that it would be obvious to establish transmission links using the satellite and wireless channels as taught by Wu to provide connection and communication links.

The Office Action cites a passage at column 1, lines 20-27, and FIG. 5A in support of this line of reasoning. The cited passage from Wu discloses that there are a variety of different communication channels for transmitting or transporting video

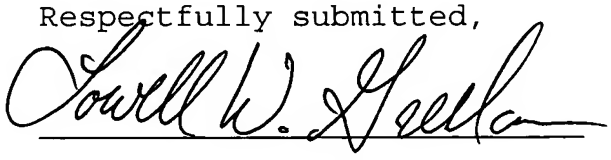
data. Wu further mentions that communication channels such as digital subscriber loop access networks, ATM networks, satellite, or wireless digital transmission facilities are well known. Wu further defines a communication channel broadly as being a connection facility to convey properly formatted digital information from one point to another.

The general disclosure of satellite networks and satellite communication channels does not specify or otherwise imply that these communications channels are voice channels. Nevertheless, claim 15 depends from claim 1 and is believed to be allowable at least for the reasons set forth in connection with claim 1.

Accordingly, this Amendment amends claims 11, 12, and 24. Currently amended claims 11, 12, and 24 remain in the application and are believed to be allowable. In addition, claims 1, 3-10, 13-15, 25, and 26 remain in the application as originally or previously submitted and are believed to be allowable.

Applicants believe that the foregoing remarks are fully responsive to the rejections recited in the 1 April 2008 Office Action and that the present application is now in a condition for allowance. Accordingly, reconsideration of the present application is respectfully requested.

Respectfully submitted,



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